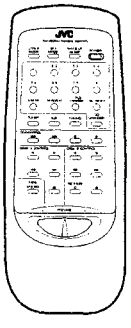
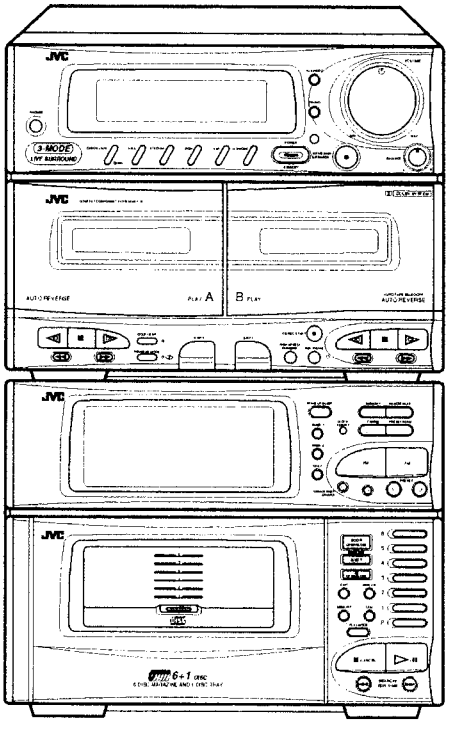
JVC

STEREO RECEIVER

CA-C55BK

Pick up	OPTIMA-5
CD signal processor	MN662720RB





Area Suffix

A ···Australia
BS ···the U.K.
C ···Canada
E ···Continental Europe
G ···Germany
GI ···Italy
J ···the U.S.A.
VX ···East Europe
US ···Singapore
UT ···Taiwan
UC ···China
U ···Other Area

COMPACT disc DIGITAL AUDIO

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Feb. 1994

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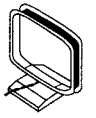
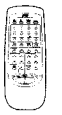
Getting started

Check to be sure you have all of the following things, which are supplied with the system.

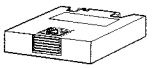


AM Loop Antenna



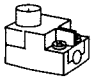
Remote Controller

Batteries



Magazine

FM Feeder Antenna



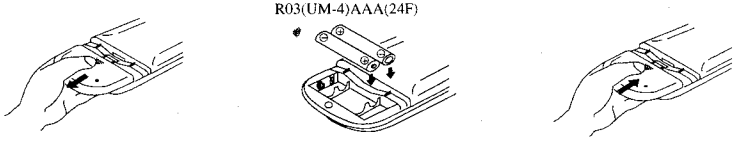
FM Antenna Adaptor

If any are missing, contact your dealer immediately.

How to Put Batteries in the Remote Controller

Match the polarity (+ and –) on the batteries with the + and – markings on the battery compartment.

R03(UM-4)AAA(24F)



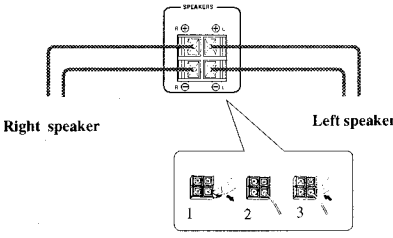
CAUTION: Observe Proper Handling of Batteries.
To avoid battery leakage or explosion:

- Remove batteries when the Remote controller will not be used for a long time.
- When you need to replace the batteries, replace both batteries at the same time with new ones.
- Don't use an old battery together with a new one.
- Don't use different types of batteries together.

Connecting the Speakers *(Please refer to instructions for speakers as well when you connect speakers.)*

For each speaker connect one end of the speaker wire to the speaker terminals on the back of the CA-C55BK and one end to the speaker.

1. Open each terminal.
2. Insert the end of the speaker wire as shown (be sure to remove the insulation at the end of each wire first).
3. Close the terminals to clamp the speaker wires firmly in place.
4. Connect the red (+) and black (–) terminals of the right side speaker to the red (+) and black (–) terminals marked R on the CA-C55BK. Connect the red (+) and black (–) terminals of the left side speaker to the red (+) and black (–) terminals marked L on the CA-C55BK.

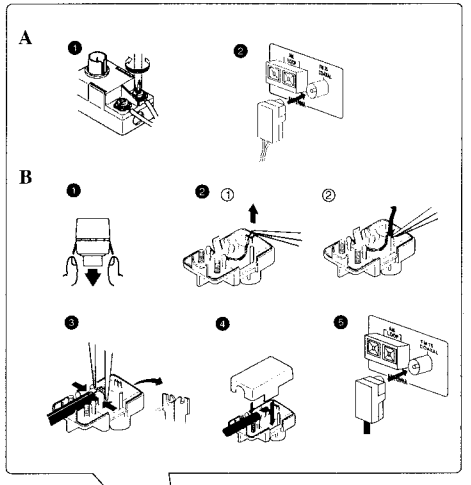


Right speaker **Left speaker**

IMPORTANT: Match the polarity of the speaker terminals with the polarity of the terminals on the CA-C55BK, red (+) to red (+) and black (–) to black (–). Check your speakers for correct impedance: 8 ohms speakers only.

Connecting the FM and AM Antennas

FM Antenna Connections



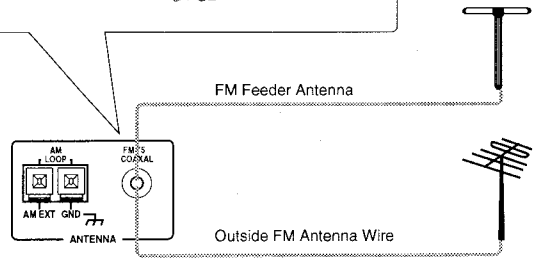
A. Using the Supplied Feeder Antenna

❶ Attach the feeder antenna to the FM connector as shown in the figure.
❷ Connect the FM connector to the FM 75-ohm COAXIAL terminal.

B. Using FM 75-ohm antenna Cable (Not Supplied)

❶ Open the claws at both sides and remove the cover.
❷ Move the conductor wire from ① to ② using tweezers or a similar instrument (only when using coaxial cable).
❸ Fix the coaxial cable and its core.
❹ Put on the cover.
❺ Connect the FM connector on the FM 75-ohm COAXIAL terminal.

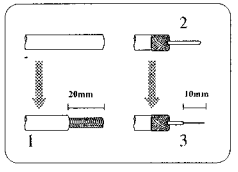
Note: Make sure the antenna conductors do not touch any other terminals, connecting cords and power cord in the system.
This could cause poor reception.



Unfold the loops of the supplied dipole FM feeder antenna and extend them as shown. Fasten them up in the position which gives you the best FM reception.

If reception is poor, connect the outside antenna.

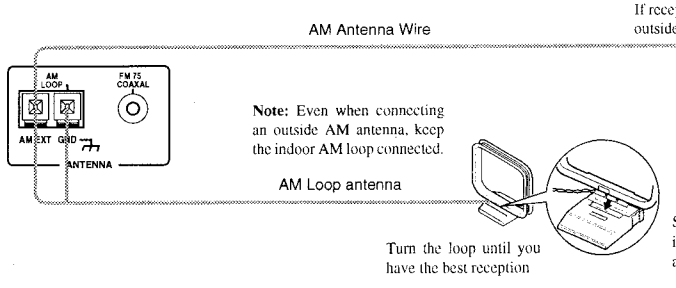
Before attaching a 75 ohm coaxial lead (the kind with a round wire going to an outside antenna), disconnect the supplied dipole indoor antenna.



How to Strip the 75-ohm Coaxial Cable

1. Strip back the outside covering of the 75 ohm coaxial cable to expose the braided metallic mesh.
2. Pull the mesh back over the cable as shown.
3. Strip the insulation about 10 mm back from the central wire.
4. Attach to the supplied antenna adaptor, as shown in the diagram above.

AM Antenna Connections


AM Antenna Wire
If receptions is poor, connect the outside antenna.
AM LOOP
FM 75 COAXIAL
AM EXT GND
ANTENNA
AM Loop antenna
Turn the loop until you have the best reception

Note: Even when connecting an outside AM antenna, keep the indoor AM loop connected.

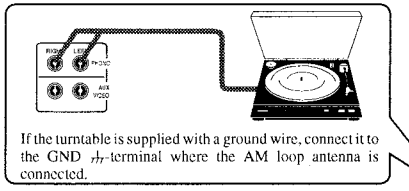
Snap the tabs on the loop into the sluts of the base to assemble the AM loop.

Connecting the System Control Cards and Connecting Auxiliary Equipment

Connect the components exactly as illustration.

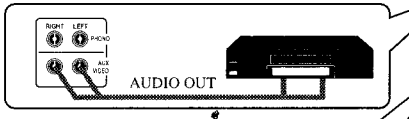
CAUTION: First make all connections before plugging the Unit into any AC power outlet.

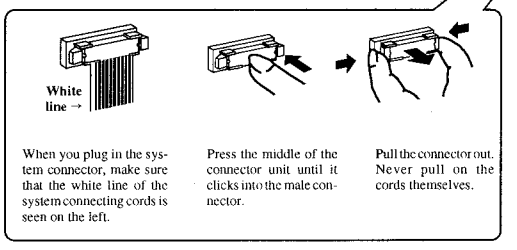
Turntable
To listen to a record, press the PHONO button.
- Use MM-type turntables only.



If the turntable is supplied with a ground wire, connect it to the GND ⏚-terminal where the AM loop antenna is connected.

VCR, etc.
To listen to these sources, press the AUX/VIDEO button.

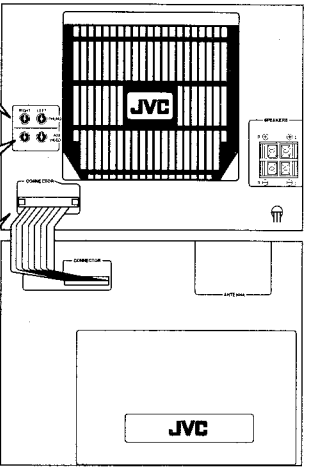




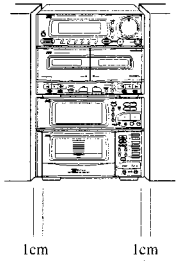
When you plug in the system connector, make sure that the white line of the system connecting cords is seen on the left.

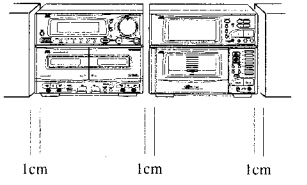
Press the middle of the connector unit until it clicks into the male connector.

Pull the connector out. Never pull on the cords themselves.



Laying Out the System

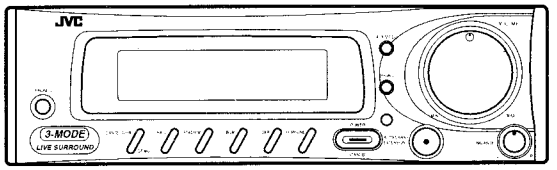




There are two ways to lay out the system as shown above:
- Leave a space of at least 1 cm on both sides of the amplifier and keep the back at least 10 cm from the wall for ventilation.
- If the system does not work will or needs repairing, please take all the components with you to the nearest agent.

Now you can plug the AC power cord into the wall outlet, and your CA-C55BK is at your command!

Using the Amplisier



The Magic of COMPUPLAY

COMPUPLAY

COMPUPLAY is JVC's feature that lets you control the most used functions of the CA-C55BK with a single touch. This One Touch Operations starts playing a CD, turns on the radio, plays a tape, etc. with a single press of the play button for that function. What One Touch Operation does for you is to turn the power on, then start function you have called for. If the Unit is not ready, such as no CD or tape in place, the Unit still comes on so you can put in a CD or tape.
How One Touch Operation works in each case is explained in the section about that function.

Turning the CA-C55BK On

Press the POWER button.

The displays come on and the red indicator on POWER lights goes out.

- ❑ The CA-C55BK comes on ready to do whatever it was doing when the power was last shut off. So if the last thing you were doing was listening to a tape in deck B, you now are ready to listen to a tape again in deck B, or you can change to another source.
- ❑ If you were listening to the radio last, the radio comes on playing that last station.

Turning the CA-C55BK Off

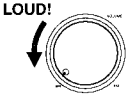
Press the POWER button again.

The red indicator on the POWER button light up and the displays blank, except for the clock display.

- ❑ A little power (12 watts) is always consumed even though power is turned off (called standby mode).
- ❑ To switch off the Unit completely, unplug the AC power cord from the AC outlet. When you unplug the AC power cord, the clock will rest to AM 12:00 right away, while the tuner preset stations will be erased in a few days.

Adjusting the Volume controls

Caution: Too LOUD!



Volume Control

Turn the VOLUME control adjust the volume level of the speakers or headphones.

CAUTION: Always set the VOLUME control to MIN before turning on a connected source such as a VCR or turntable, or starting any other of the sound sources such as the radio, tape, CD player. Otherwise, if the VOLUME control is turned up the sudden blast of sound energy can permanently damage your hearing and/or ruin your speakers.

Balance

Turn the BALANCE control to adjust the left-and-right sound balance in the speakers or headphones.

Active Bass Extension

This feature is designed and incorporated to reinforce the bass sound, depending on the volume level to maintain the richness and fullness of the bass. You cannot control it manually.
Press the ACTIVE BASS EXTENSION button to light the indicator if you want to use the Active Bass Extension function.
To cancel this function, press the ACTIVE BASS EXTENSION button again. The indicator will go off.

Listening with Headphones

A standard pair of headphones can be connected at the PHONES jack on the front panel. No sound can be heard from the speakers. Be sure to turn down the volume before connecting or putting on headphones as high volume can damage both the headphones and your hearing.

LIVE SURROUND effects:
DANCE CLUB
HALL
STADIUM

Sound Effect Modes

The CA-C55BK has some preset sound effects that give you control of the way your music sounds, so you can tailor it for your room and for the quality of the source. We can give you come idea of how each one affects the music, but the only way to really tell is to try them yourself.
You can use only one effect at a time selecting from the LIVE SURROUND or S.E.A. effects. Feel free to experiment!

LIVE SURROND effects

With these effects, the sound coming from only two speakers approaches the quality of sound from four speakers.

DANCE CLUB	Increase resonance and bass.
HALL	Adds depth and brilliance to the sound, like in a concert hall.
STADIUM	Adds clarity and spreads the sound, like in an outdoor stadium.

To get an effect, press the Live Surround preset button (DANCE CLUB, HALL, or STADIUM) on the Unit. "LIVE-S" lights up and the effect you want is pointed with the cursor (◀▶) on amp display. When using the Remote controller, press the LIVE-S MODE, you can cycle through the effects one after another.
To cancel the effect, press the button again. "LIVE-S" and cursor (◀▶) will go off the amp display. When using the Remote controller, press the LIVE-S MODE repeatedly until "LIVE-S" goes off on the amp display.

S.E.A. effects
BGM
CAR
H. PHONE

Preset S.E.A. (Sound Effect Amplifier) effects.

Adjustments of frequency range levels have been preset as three S.E.A. effects.

BGM	Used as a back ground music.
CAR	Used for recording tapes to listen to in a car.
H. PHONE	Used for recording tapes to listen to with headphones.

To get an effect, press the S.E.A. preset button (BGM, CAR, or H. PHONE) on the Unit. "SEA" lights up and the effect you want is pointed with the cursor (◀▶) on amp display. When using the Remote controller, press the SEA MODE, you can cycle through the effects one after another.
To cancel the effect, press the button again. "SEA" and cursor (◀▶) will go off the amp display. When using the Remote controller, press the SEA MODE repeatedly until "SEA" goes off on the amp display.

Sound Effect Demonstration

You may be sometimes unable to decide which sound effect to use for the music you are listening to. In this case, you can use a very helpful function — Sound Effect Demonstration
To get the function, hold down the DEMO button (the same button as the DANCE CLUB button) during play for a few seconds. The Unit briefly demonstrates six sound modes.
To cancel the function, press any Sound Effect Mode button.

Advantages in connecting optional equipment

Listening to Optional Equipment

By playing the sound from a VCR, Auxiliary equipment or turntable through the CA-C55BK, you can gain control over how the music or program sounds. Once the connected equipment is playing through the CA-C55BK, you can apply the sound effects, make recordings, or listen with the headphones.

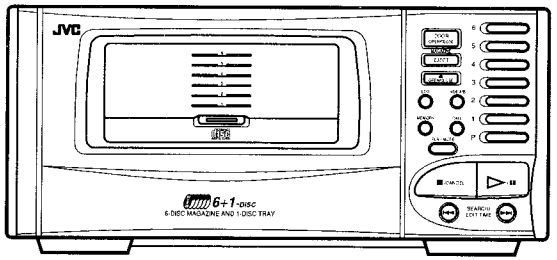
- ❑ First make sure that the connection between optional equipment and the CA-C55BK has been done correctly.

1. Set the VOLUME control to MIN.
2. Press the AUX/VIDEO button or the PHONO button.
   The Unit automatically turns on the "AUX" or "PHONO" lights up on the amp display.
3. Start playing the selected equipment.
4. Adjust the VOLUME to a proper listening level.
5. Select a desired sound effect mode if you want.

To cancel the setting

Change the source by starting any one of the CA-C55BK's built-in sound sources, such as the radio or CD player.

Using the CD player



Here are the basic things you need to know to play a CD and locate the different selections on it. Each selection is called a track, so when we are talking about locating a track, we are also talking about how you find a certain song or performance. This CD player is called an automatic changer, which can play 6 discs in the supplied magazine and one on the ordinary single tray called PLUS 1 tray.

COMPU PLAY
Compact Disc Play

Basics of Using the CD Player

The quickest way to start a CD is with the One Touch Operation:

❑ Press the Disc buttons (1 to 6 and P).
- If no magazine is inserted, the Unit turns on and door opens.

❑ Press the ▷/II button (or ► on the Remote controller) on the CD player.
- If a CD is already loaded in the inserted magazine or on the PLUS 1 tray, the Unit automatically turns on and starts to play it from track 1.
- If no CD is loaded, the Unit automatically turns on and the PLUS 1 tray comes out. This is the exactly same as what happens if you press the OPEN/CLOSE ▲ button instead of the ▷/II button.

How to use the CD player: from the most basic to advanced

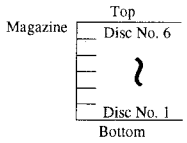
To Prepare Discs

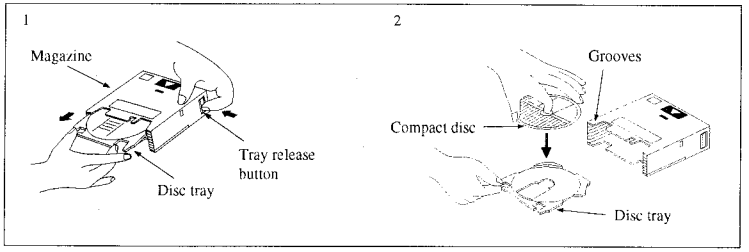
The discs are first loaded into the trays which are then inserted into the magazine. The magazine is then put into the changer. You can also place a disc on the PLUS 1 tray.

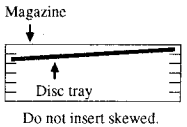
To install discs into the magazine

1. To remove the disc tray from the magazine, slide the disc tray out while holding down the tray release button.
2. Place a disc on the disc tray with its label side up.
3. Line up the disc tray with the grooves in the magazine and push the disc tray right in.
   ❑ Its unnecessary to press the tray release button when inserting the disc tray.

In the magazine, the disc No.s will be as follows:







Do not insert skewed.

❑ When inserting or removing a disc tray:
- Never bend the disc or force it into the magazine. A disc tray inserted skewed may cause a malfunction.
- The magazine should be held horizontally.

❑ The openings in the disc trays are for passage of the laser signal. These openings leave a part of the shiny surface of the disc exposed. Do not touch this shiny surface.

❑ It is impossible to play a disc if it is in upside-down.

❑ Never place a disc directly in the magazine without using the disc tray.

❑ If you want to use 8 cm (3 inch) CDs, use an optional magazine designed for these discs — XC-M73.

To insert the magazine

1. Press the DOOR OPEN/CLOSE button on the unit to open the door.
2. Insert the magazine, with disc loaded, into the changer and push it in gently until it clicks in place.
   ❑ The ▲ mark on the magazine must be facing up.
3. Press the DOOR OPEN/CLOSE button again to close the door.

To remove the magazine, Press the MAGAZINE EJECT button.

CAUTION: The CD player may be damaged if the magazine is pushed in with too much force.

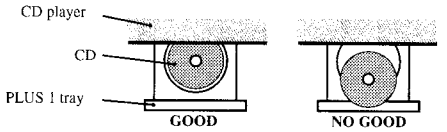
To load a CD on the PLUS 1 tray

1. Press the OPEN/CLOSE ▲ button.
   The door opens and the PLUS 1 tray comes out automatically.
2. Put a CD, with its label side up, into the tray.
3. Press the OPEN/CLOSE ▲ button or the DOOR OPEN/CLOSE button to close the tray.
   ❑ It is unnecessary to press the OPEN/CLOSE ▲ button to the tray. If you press the ▷/II button to start play, the tray closes automatically.

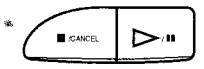
Notes:

- Remove any objects in front of the door, when opening it.
- Do not use your hand to open or close the door.
- When you close the PLUS 1 tray, make sure the magazine is inserted completely.
- Do not operate the Unit while the door is opening or closing.
- When the door is opened, do not press the disc button (1 to 6 and P) or change the source.
- When inserting or removing the magazine, do not operate a CD on the PLUS 1 tray, vice versa, when putting in or out a CD on the PLUS 1 tray, do not operate a CD in the magazine.

ATTENTION: Please set a CD in the right place at the center of the PLUS 1 tray, when you play a CD with the tray. The PLUS 1 tray would cause malfunction, of you set a CD in a wrong place or missed the center of the tray.



To remove a CD from the PLUS 1 tray, press the OPEN/CLOSE ▲ button again.



To Play a CD

1. Prepare discs.
2. Press the ▷/II button (or ► on the Remote controller).
   The Unit plays the first track on the disc in the PLUS 1 tray. (The current disc number is indicated by the arrow on the display.) If no disc is loaded on the PLUS 1 tray, the Unit automatically skips the empty tray, and finds and plays the discs you have put in the magazine from bottom (Disc No.1) to top (Disc No.6). The indicators for these skipped trays go off. The Unit memorized these empty trays and will skip them next time without searching until the magazine is ejected.

To stop the CD, press the ■/CANCEL button (or ■ on the Remote controller).

To pause the play, press the ▷/II button while the CD is playing.

To Change Discs While Playing

To change discs in the magazine while playing a CD in the PLUS 1 tray.

1. Press the MAGAZINE EJECT button.
   The door opens and the magazine comes out.
2. Change the discs in the magazine.
3. Push back in the magazine.
4. Press the DOOR OPEN/CLOSE button to close the door.

To change discs in the PLUS 1 tray while playing a CD in the magazine.

1. Press the OPEN/CLOSE ⏏ button.
   The door opens and the PLUS 1 tray comes out.
2. Change the discs.
3. Press the OPEN/CLOSE ⏏ button again or the DOOR OPEN/CLOSE button.
   The tray goes back and the door closes.

❑ While playing a CD, do not keep the door opened except changing discs.

How to find a track

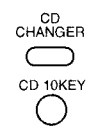
To Select the Disc, Track or Passage within a Track

By using the Unit

1. If the disc with the track you want is not playing, enter the number of disc you want to using the disc buttons (1 to 6 and P) on the rightmost portion of the CD player.
   ❑ Example: for the third disc (from the bottom) in the magazine, press 3.
   For the disc on the PLUS 1 tray, press P.
2. Select the number of the track you want using the SEARCH/EDIT TIME I◄◄ or ►►I button.
   The selected track starts playing.
   ❑ Each time you press briefly and release the SEARCH/EDIT TIME I◄◄ or ►►I button, the track changes by one.
   Press and release the SEARCH/EDIT TIME ►►I button to go ahead one track at a time.
   Press and release the SEARCH/EDIT TIME I◄◄ button to go back one track at a time.
   ❑ Holding down the SEARCH/EDIT TIME I◄◄ or ►►I button will fast forward or fast reverse the CD so you can quickly find particular passage in the selection you are listening to.

By using the Remote Controller

1. If the disc with the track you want is not playing, first press the CD CHANGER button, then enter the number of disc you want using the numeric keys (1 to 6 and P).
   ❑ Example: for the third disc (from the bottom) in the magazine, press 3.
   For the disc on the PLUS1 tray, press P.
2. Press the CD 10KEY.
3. Enter the number of the track you want using the numeric keys.
   The selected track starts playing.
   ❑ Example: for track 5, press 5. For track 15, press +10 then 5. For track 20, press +10, then 10.
   ❑ You can also use the I◄◄ or ►►I button to change tracks. However, you cannot fast forward or reverse forward to locate a articular passage using the Remote controller.

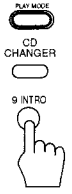


After you have pressed the ► button on the Remote controller, the numeric keys on the Remote controller functions as the disc buttons until you change it.

Searching the contents of CDs

Intro Scan

You can use two types of intro scan functions (Disc Intro Scan and Track Intro Scan) to search for a desired disc or track.



1. Make sure that the CD is not playing and "CONTINUE" lights up on the CD/tuner display.
   If not, stop the CD player and press the PLAY MODE button on the Unit until "CONTINUE" lights up on the CD/tuner display.
2. Press the CD CHANGER on the Remote controller.
3. Press the INTRO on the Remote controller.
   Each time you press the button, the intro scan mode changes and lights up on the CD/tuner display in the following sequence:

   ► DISC INTRO ——► INTRO ——► No indication ——┐
   └──┘

4. Press the ▻/II button (or ► on the Remote controller).
   Disc Intro Scan (when "DISC INTRO" lights up):
   Plays the beginning of the first track of each CD for about 15 seconds starting with the disc on the PLUS 1 tray and then disc no. 1 disc through disc no. 6 disc in the magazine.
   Track Intro Scan (when only "INTRO" lights up):
   Plays the beginning of each track of each CD for about 15 seconds starting with the disc on the PLUS 1 tray and then disc no. 1 disc through disc no. 6 disc in the magazine.

5. Press the SEARCH/EDIT TIME I◄◄ button (or I◄◄ on the Remote controller) when the desired track is reached.
   Intro scan is canceled and normal playback starts from the track.
   ❑ If you press the following buttons instead of the SEARCH/EDIT TIME I◄◄ button, intro scan is also canceled and then:
   • SEARCH/EDIT TIME ►►I: Continuous play starts from the next track.
   • Disc buttons (1 to 6 and P (PULS 1)): Continuous play start from the first track of the selected disc.

To stop playing, press the ■/CANCEL button (or ■ on the Remote controller).

To exit intro scan mode, press INTRO so that neither "DISC INTRO" nor "INTRO" lights on the display.

Programming the Playing Order of the Tracks

In addition to the high quality sound which makes the CD such a good way to listen to music, you can change the order in which the tracks play.

With programming, you can play back tracks in any order

Random Play

The tracks will play in no special order when you use this mode.
Before starting a CD, press the PLAY MODE button repeatedly until "RANDOM" lights up on the CD/tuner display.
When all of the tracks have been played, the CD stops.

To stop playing, press the ■/CANCEL button (or ■ on the Remote controller).

To exit random mode, press the PLAY MODE button until "RANDOM" is no longer lighted on the CD/tuner display (the Unit must be in stop mode).

Program Play

You can change the order in which the discs and tracks play, and select only the discs and tracks you want from among those loaded in the magazine and the PLUS 1 tray.

❑ You can program from either the Unit buttons or the Remote controller, or a combination of both.
❑ You can program up to 32 steps in any desired order from among the discs in the player. Since a step can be either a single track or an entire disc with many tracks, the total number of selections which will actually play can be much larger than 32.

How to program

Programming Procedure:
You can only make or change a program when the CD player is stopped.

By using the Unit

1. Press the PLAY MODE button repeatedly until "PROGRAM" lights up on the CD/tuner display.
2. Select a disc with the disc buttons (1 to 6 and P). As soon as a disc is selected, it is memorized and "AL" lights up on the CD/tuner display. If you want all the tracks on that disc to play as part of the program, skip step 3.
3. To select individual tracks from the selected disc (its number is indicated by the arrow on the display), press the SEARCH/EDIT TIME I◄◄ or ►►I button.
4. Press the MEMORY button.
5. Repeat steps 2 - 4 until you have entered all the tracks you want to program.
6. Press the ▻/II button .
   The Unit plays the tracks in the order you have programmed them.

By using the Remote controller

1. Press the CD CHANGER.
2. Press the PLAY MODE repeatedly until "PROGRAM" lights up on the CD/tuner display.
3. Select a disc with the numeric keys (1 to 6 and P).
4. To select individual tracks from the selected disc enter each number by pressing the CD 10 KEY and using the numeric keys (1 to 10 and +10).
   ❑ Example: for track 5, press 5. For track 15, press +10 and 5. For track 20, press +10 and 10.

❑ You can also use the I◄◄ or ►►I to select tracks.

5. Repeat 1 and 3 - 4 until you have entered all the tracks you want to program.
6. Press the ►.
   The Unit plays the tracks in the order you have programmed them.

To stop playing, press the ■/CANCEL (or ■ on the Remote Controller) once.

To delete the program and exit program mode, press the ■/CANCEL button on the Unit repeatedly until all the program steps are deleted, and then press the PLAY MODE button until "CONTINUE" appears on the display.

- ❑ You can skip to a particular program step by pressing the SEARCH/EDIT TIME |◄◄ or ►►| button during program play.
- ❑ To play the programmed tracks over and over, press the REPEAT on the remote controller so that "REPEAT" lights up on the display.

Programming Hints

A few Hints to Make Programming Easier

CALL

To check the program contents (the Unit must be in stop mode)

- ❑ Each time you press the CALL button on the Unit, the program contents are shown on the CD/tuner display in the programmed order.

To change the program contents

- ❑ Press the CALL button until the CD/tuner display shows the program step to correct. Enter the new disc number and/or track number, which will replace the ones originally showing.
- ❑ To delete a program step, press CALL button until the CD/tuner display shows the program step to delete, then the press ■/CANCEL button.
- ❑ You can use both of these ways to change program steps during programming as well as later.

Repeat a selection or the CDs

Repeating a Selection or the Discs

You can have all the discs, the program or the individual selection currently playing repeat as many times as you like by pressing the REPEAT on the Remote controller.

CD CHANGER

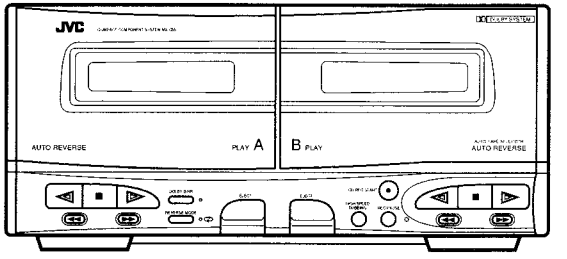
10 REPEAT

1. Press the CD CHANGER on the Remote controller.
2. Press the REPEAT on the Remote controller.
   Each time you press the REPEAT, it cycles from function-off, which turns "REPEAT" out on the CD/tuner display, to "REPEAT" which will repeat all the tracks in order or according to the program you have set, and then to "REPEAT 1" which will repeat the currently playing track.

To exit repeat mode, press the REPEAT so that neither "REPEAT" or "REPEAT 1" lights on the display.

- ❑ Press the REPEAT before or during random play to instruct the CA-C55BK to continue with a different random track selection after the last selection of the last disc is played.

Using the Cassette Deck



Listen to a tape: How to use your cassette deck

Listening to a Tape

The cassette deck allows you to play, record and dub audio tapes.

- ❑ Most tapes are now recorded with the Dolby NR system, so first check which type of the Dolby NR system has been used on the tape. Only the Dolby B NR is incorporated into the CA-C55BK.
- ❑ With Automatic Tape Detection, you can listen to type I or II tapes without changing any settings.

One Touch Play

By pressing either the ▷ or ◁ button on either deck A or B, the Unit will come on, and if a tape is in the deck, it will start to play. If no tape is loaded, the Unit will come on and wait for further instructions.

COMPU PLAY

Playback procedure

Regular Play

When the power is already on, you can use this basic procedure:

1. Press the EJECT button for the deck you want to use.
2. When the cassette carrier opens, put the cassette in, with the exposed part of the tape down toward the base of the CA-C55BK.
   - ❑ If the cassette carrier does not open, turn the Unit off, then back on again and press the EJECT button.
3. Close the carrier gently.
4. Press ▷ to play the front side, or ◁ to play the reverse side. The arrow indicator on the pressed button starts blinking and tape play starts.

To stop playing, press the ■ button.

To remove the tape, press the EJECT button.

Fast Left and Fast Right

- ❑ While the tape is stopped, press the ◄◄ button and the tape will wind rapidly onto the left side of the cassette without playing.
- ❑ While the tape is stopped, press ►► and the tape will wind rapidly onto the right side of the cassette without playing.

Finding the place you want: Music Scan

Music Scan

To find the beginning of a music track during play, use the Music Scan function. Music Scan searches for blank portions that usually separate tracks, then plays the next song.

- ❑ If you use Music Scan on deck A while recording on deck B, recording will stop.

Scan back

To find the beginning of the current song

Press the ◄◄ or ►► button during play.

- ❑ Make sure that you press the ◄◄ or ►► button in the opposite direction to tape play. Searching stops automatically at the beginning of the current song, and the current song starts automatically.

Scan forward

To find the beginning of the next song

Press the ◄◄ or ►► button during play.

- ❑ Make sure that you press the ◄◄ or ►► button in the same direction as tape play. Searching stops automatically at the beginning of the next song, and the next song starts automatically.

The Music Scan works by detecting a 4-second long blank at the beginning of each selection, so it won't work well if your tape has:

- No blank at the beginning of a track
- Noise (often caused by much use or poor quality dubbing) which fills the blank with noise.
- Long, very soft passages or pauses in a selection. The scan will detect these instead of the 4-second long blanks. If this happens, just go ahead and scan again until you reach the selection you want.

More useful things to know:

- **Reverse Mode**
- **Continuous Play**

- **Dolby**

Useful Other Features Using the Cassette Deck

- Use **Reverse Mode** to make the tape automatically reverse at the end of a side and start playing the other side. Press the REVERSE MODE button to change from Reverse Mode on (the indicator is lit) to Reverse Mode off, or from off, to on.
- **Continuous Play:** When a tape finishes playing with the Reverse Mode LED on, the Unit always checks to see if a tape is in the other deck. If one is there, it automatically starts playing it. This Continuous Play happens regardless of which deck starts first.
- Press the DOLBY B NR button to switch Dolby B Noise Reduction on (the indicator lights up) or off (the indicator goes off). If a tape is recorded with the Dolby B NR system, playing it back with the Dolby NR on will reduce tape noise and improve the clarity of the sound.

Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
"DOLBY" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.

Recording

What can you record?
- **Tapes**
- **Radio**
- **CDs**
- **Connected source**

Recording onto cassette tape from any of the sound sources is easy and the CA-C55BK does most of the work. Just have a tape in deck B, have the source ready, make one or two settings, and you're ready to record. For each source the procedure is a little different and now we'll explain just what to do for each one. If you forget, just come back to the section which has the specific procedures you need. But first, here are a few things to make your recordings better.

Things to Know before You Start recording

Copyright

- **It may be unlawful to record or playback copyrighted material without the consent of the copyright owner.**

Reduce hiss — Dolby NR

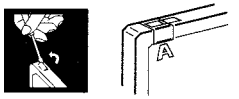
- Press the DOLBY B NR button — the indicator lights up — to reduce tape hiss, except when dubbing tapes since Dolby NR is inactive in dubbing mode regardless of the setting of DOLBY B NR. The dubbed tape automatically contains the same processing as the source tape.

Recording level

- The recording level, which is the volume at which the new tape is being made, is automatically set correctly, so it is not affected by the VOLUME control on the CA-C55BK. Thus, you can adjust the sound you are actually listening to without changing the recording level.

Erasure protection

- Two small tabs on the back, one for side A and one for side B, can be removed to prevent accidental erasure or re-recording. To record on a cassette with the tabs removed, you must cover the holes with adhesive tape first. However, when a tape II tape is used, only cover part of the hole as shown, since the other part of the hole is used to detect the tape type.



Recording sound mode

- When recording, you can use the sound effect modes to condition the music as it is recorded. But when recording using CD Direct, Auto Edit or Program Edit, once recording has started, these settings cannot be changed. When recording from cassette deck A to deck B, the sound effects cannot be used, because the signal doesn't go through the amplifier. This method gives you the highest quality dubbed tapes.

Usable tape type

- Type I and type II tapes can be used for recording.

CAUTION: If recordings you have made have excessive noise or static, the Unit may be too close to a TV which has been on during the recording. Either turn off the TV or increase the distance between the TV and the CA-C55BK.

Standard recording: Any source to tape

Standard Recording

This is the basic method for recording any source. The CA-C55BK also has special ways for recording CD to tape, and tape to tape, which save you time and effort, as well as give you some special effects.
However, when you need to add a selection to a tape you have made, or are combining selections from several sources on one tape, use the method we describe here; just substitute the source you want, such as tape in deck A, or CD, or radio in this procedure. You can also record from an auxiliary source with this procedure.

Source to tape: Step by step

To Record Any Sound Source to Tape

Follow these steps to record from any sound source onto a tape in deck B.

1. Insert a blank or erasable tape into deck B.
2. Press the REC PAUSE button.
   The REC PAUSE indicator lights up.
3. Press the REVERSE MODE button if you want to record on both sides of the tape.
   The REVERSE MODE indicator lights up.
4. Prepare the source, for example,tuning in a radio station, loading CDs, turning on connected equipment.
5. Press either the ▷ button to record on the front side, or the ◁ button to record on the reverse side, on deck B.

To pause any time during recording process
Press the REC PAUSE button again. Then press either the ▷ or ◁ button on deck B to restart recording.

To stop any time during recording process
Press the ■ button on deck B.

CAUTION: During recording, DO NOT change the source or change discs. Otherwise, recording will be interrupted.

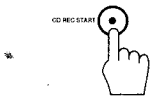
CD to tape recording: Introduction

CD to Tape Recording

There are four ways to record from CD to tape:

- **Standard Recording** — Described on the previous page.
- **CD Direct Recording** — Everything on the CD goes onto the tape in the order it is on the CD, or according to an order you have set in a program.
- **Auto Edit Recording** — Your CA-C55BK figures out which selections to put on which side of the tape, so a selection isn't cut off before it's finished when the tape runs out.
- **Program Edit Recording** — First you select tracks to record by using the programming method described on page 11, and then start play and recording simultaneously.

CD Direct Recording: Step by step



CD Direct Recording

1. Prepare CDs. (See page 8.)
2. Set the sound effect mode if you want.
3. Insert a cassette in deck B to record on.
   - If you want to record on both side of the tape, press the REVERSE MODE button on the cassette deck so that the REVERSE MODE indicator lights up.
4. Press the CD REC START button on the cassette deck.
   The Unit plays the CDs (from the disc on the PLUS 1 tray then to the discs in the magazine) and starts recording.

   At the end of the tape, the CA-C55BK automatically goes back to the beginning of the last selection and re-records it, this time gently fading out at the end. If you selected the Reverse Mode, the reverse side starts with the last selection on the front side and will be faded out at the end again. (A 10 second blank is created on the beginning of the reverse side.)
   When the tapes is finished, the Unit stops the CD and the cassette deck.

To stop any time during the recording process
Press the ■ button on deck B.

For CD Direct Recording using more than one disc, use a blank tape, If you use a pre-recorded tape, pre-recorded sound may be unerased between newly-recorded tracks.

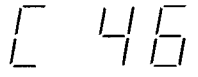
Auto Edit Recording: Introduction

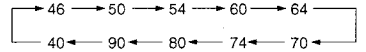
Auto Edit Recording

Using Auto Edit, you can record the CD tracks to fit the tape, so a selection isn't cut off. Auto Edit is one of the best ways to copy all of a CD onto a tepe.
Auto Edit programs the CD tracks in the numerical order. To prevent the end of the last track on the front side from being cut off, the last track on the front side is selected to fit on the remaining tape length.

Auto Edit Recording: Step by step

1. Prepare CDs. (See page 8.)
2. Set the sound effect mode if you want.
3. Press the EDIT button on the CD player repeatedly until "A. EDIT" lights up on the CD/tuner display.
4. Press the SEARCH/EDIT TIME I◄◄ or ►►I button (I◄◄ or ►►I button on the Remote controller) repeatedly to set the tape length.
   - ❑ You can select a different length of tape from ten possibilities programmed into the CA-C55BK: 40, 46, 50, 54, 60, 64, 70, 74, 80, 90. Cycle through these choice using the SEARCH/EDIT TIME I◄◄ or ►►I button (I◄◄ or ►►I on the Remote controller).





5. Press the SIDE A/B button.
6. Select a disc with the disc buttons (1 to 6 and P).
   The display shows which tracks will go on the front side (A) and which on the reverse side (B). Each time you press the SIDE A/B button, the display switches between A and B.
   - ❑ To record both sides of the tape, show the tracks for the front side (A) on the display.
     To record only on the reverse side (B), show the tracks for the reverse side (B) on display.
7. Insert a blank or erasable cassette in deck B.
   - ❑ If you want to record on both sides of the tape, press the REVERSE MODE button on the cassette deck so that the REVERSE MODE indicator lights up.
8. Press the CD REC START button on the cassette deck.
   The Unit will automatically rewind the tape to the beginning of the front side, create a 10 second blank, turn on the CD and start recording. (A 10 second blank is also created on the beginning of the reverse side.)

To stop any time during the recording process
Press the ■ button on deck B or ■/CANCEL button on the CD player.

To exit edit mode nad delete the program
Press the PLAY MODE button so "A.EDIT" is no longer lighted on the CD/tuner display (the Unit must be in stop mode.)

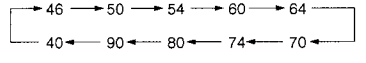
> Using the Auto Edit, you can program up to 16 tracks for each side of the tape, and cannot program a track the number of which on the disc is greater than 31.

Program Edit Recording: Step by step

Program Edit Recording

Using Program Edit, you can record only the CD tracks you want,and fit them onto the tape. Program Edit is one of the best ways to make a tape of only your favourite songs.

1. Prepare CDs. (See page 8.)
2. Set the sound effect mode if you want.
3. Press the EDIT button on the CD player repeatedly until "P. EDIT" lights up on the CD/tuner display.
4. Press the SEARCH/EDIT TIME I◄◄ or ►►I button (I◄◄ or ►►I button on the Remote controller) repeatedly to set the tape length.
   - ❑ You can select a different length of tape from ten possibilities programmed into the CA-C55BK: 40, 46, 50, 54, 60, 64, 70, 74, 80, 90. Cycle through these choices using the SEARCH/EDIT TIME I◄◄ or ►►I button (I◄◄ or ►►I on the Remote controller).



5. Press the SIDE A/B button and select the tracks you want to record on the front side (A). (See "Program Play" on page 11. For Program Edit, however, it is impossible to program all the tracks on a disc as one program step.)
   The display shows which tracks will go on the front side (A).
   - ❑ If the total playing time for the front side (A) exceeds the tape length for this side, the displayed excess playing time blinks. During recording, the last track on this side will be recorded fading out at the end of the tape.
6. Press the SIDE A/B button and select the tracks you want to record on the reverse side (B). (See "Program Play" on page 11. For Program Edit, however, it is impossible to program all the tracks on a disc as one program step.)
   The display shows which tracks will go on the reverse side (B).
   - ❑ If the total playing time for the reverse side (B) exceeds the tape length for this side, the displayed excess playing time blinks. During recording, the last track on this side will be recorded fading out at the end of the tape.
7. Insert a blank or erasable cassette in deck B.
   - ❑ If you want to record on both sides of the tape, press the REVERSE MODE button on the cassette deck so that the REVERSE MODE indicator lights up.
8. Press the CD REC START button on the cassette deck.
   The Unit will automatically rewind the tape to the beginning of the front side, create a 10 second blank, turn on the CD and start recording. (A 10 second blank is also created on the beginning of the reverse side.)

To stop any time duing the recording process
Press the ■ button on deck B or ■/CANCEL button on the CD player.

To exit edit mode and delete the program
Press the PLAY MODE button so "P. EDIT" is no longer lighted on the CD/tuner display (the Unit must be in stop mode.)

> - ❑ If you choose wrong tracks during programming, press the ■/CANCEL button on the CD player. Each time you press the button, the last-chosen track is deleted from the program.
> - ❑ Using the Program Edit, you can program up to 16 tracks for each side of the tape, and cannot program a track the number of which on the disc is greater than 31.
> - ❑ If you want to make some changes in program after starting recording, make sure that the display is showing the tracks for the front side (A) when you restart recording. If not, press the SIDE A/B button.

Tape to tape dubbing: Introduction

Tape to Tape Recording (Dubbing)

Recording from one tape to another is called dubbing.
You can dub at regular speed for the best possible quality, or with a slight loss in sound quality you can dub at high speed. With high speed it takes only about one-half the time to copy a tape.
- ❑ To dub both sides of a tape, start from side A for both deck A and deck B, and press the REVERSE MODE so that the REVERSE MODE indicator lights up.
- ❑ It is preferable that the type of tape (Normal or CrO_2) you record from be the same as the type you record onto.

Regular speed dubbing: Step by step

Regular Speed Dubbing

1. Insert a source cassette you want to copy from into deck A from playback.
2. Insert a blank or erasable cassette you want to copy onto into deck B for recording.
3. Press the REC PAUSE button on deck B.
4. Press the ▻ button (or ◅ button) on deck B.
   Recording starts.
   - To advance the leader tape (the beginning of the tape on which you cannot record), start recording first and wait about 10 seconds before starting deck A.
5. Press the ▻ button (or ◅ button) on deck A.
   Deck A starts playing.

To stop any time during the dubbing process
Press the ■ button on both deck A and deck B.

High speed dubbing: Step by step

High Speed Dubbing

Although the quality of the dubbed tape is a little less, high speed dubbing is a very convenient way to record from one tape to another.

1. Insert a source cassette you want to copy from into deck A, and a blank or erasable cassette to be copied onto in deck B.
2. For each deck, select the side (A or B) to start with.
   To change the side, press the ◁ or ▷ button and then quickly press the ■ button on the same deck.
   ❑ The tape will travel in the direction of the lit arrow indicator on the ◁ or ▷ button for each deck.
3. Press the HIGH SPEED DUBBING button on the cassette deck.
   Both decks start, deck a playing and deck B recording.
   ❑ The sound you hear is strange because it is much faster than usual, and you may not want to listen to it. Turn it down with the VOLUME control, or press the FADE MUTING on the Remote controller.
   ❑ You can also listen to anther source such as the radio or the CD player, just as if you weren't dubbing.

To stop any time during the dubbing process
Press the ■ button on deck B.

To record selections from several different tapes during high speed dubbing.
When you want to take selections from several different tapes and combine them on one tape during high speed dubbing, follow these steps:

1. Press the ■ button on deck A.
   ❑ This causes deck A to stop, so you can change tapes, and deck B makes a few seconds blank and pauses.
   • If you don't want to make a few seconds blank, press the REC PAUSE button before pressing the ■ button on deck A.
2. Change the tape in deck A.
3. Press the HIGH SPEED DUBBING button to start deck A playing and deck B recording again.

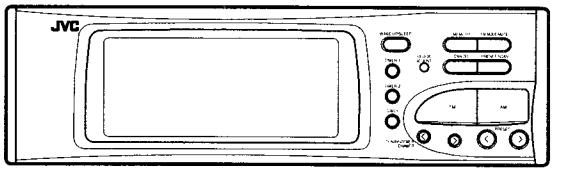
> ❑ Dolby NR is inactive in dubbing mode regardless of the setting of DOLBY B NR. The dubbed tape automatically contains the same processing as the source tape.
> ❑ You cannot dub using the sound effect modes such as DANCE CLUB, HALL, STADIUM etc.

Recording with the Timer

The Cassette Deck can be set up to record a tape automatically. This is especially useful for recording broadcasts when you are not around, or late at night when you are asleep.

1. Insert a cassette for recording into deck B.
2. Set the timer, by following the steps in "Setting the Timers".
3. Select one of the following sources:
   TIMER REC SOURCE TUNER — Records TUNER preset stations
   TIMER REC SOURCE - - - - — Records from the source selected before turning off the Unit.

Using the Tuner



Listening to the Radio

You can listen to both FM and AM stations. Stations can be turned in manually, automatically, or from preset memory storage.

❑ Before listening to the radio:
• Check that both the FM and AM antennas are firmly connected.

One Touch Radio

Just press the FM button to turn on the Unit and start playing the most recent FM station tuned in, or press the AM button to start the most recent AM station tuned in.

❑ You can switch from any other sound source to the radio by pressing either the FM or AM button.

Tuning in a Station

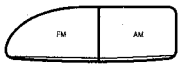
Press the FM or AM button to turn on the radio. The CD/tuner display shows the station frequency tuned to.

Three ways to tune in a station

Three ways to select a station

1. Press the TUNING/TIMER/DIMMER < or > button repeatedly to move from frequency to frequency until you find the one you want.
   OR
2. Hold down the TUNING/TIMER/DIMMER < or > button, the frequency starts changing on the CD/tuner display. When a station is tuned in, "TUNED" lights up on the display and the frequency stops changing.
   OR
3. (Possible only after presetting stations.)
   Press once and release the PRESET < or > button to go to the next preset station, or hold the PRESET < or > button to cycle through the preset stations: release the button when the preset station you want shows on the CD/tuner display.
   You can also use the Remote controller to tune in preset channels:
   1. Press the TUNER so that you can receive the most recent station tuned in.
   2. Select the station by entering the preset number in the numeric keys of the Remote controller.

How to preset FM and AM radio stations



Presetting Stations

You can store up to 40 of your favorite radio stations (FM and AM) in memory, giving you quick, easy access to the stations.

1. Select a band by pressing either the FM or AM button.
2. Press the TUNING/TIMER/DIMMER < or > button to tune in a station.
3. Press the MEMORY button on the Tuner.
   On the CD/tuner display "MEMORY" will blink for 5 seconds.
   ❑ During these 5 seconds while "MEMORY" is blinking you can assign a channel number to the station and enter it into the memory.
4. Select a channel number by pressing the PRESET < or > button until you find the channel number you want.
5. Press the MEMORY button and the station will be assigned to the channel number showing on the CD/tuner display.
   ❑ If a station has been previously stored using the same channel number, it will be erased and the newly selected station will be stored.
   ❑ If "MEMORY" in the CD/tuner display goes off, start again from step 3.
6. Repeat steps 1 - 5 for each station you want to store in memory with a preset number.

Caution! If the Unit is unplugged or if a power failure occurs, the preset stations stored in memory may be lost.

To cancel the preset stations:

1. Press the CANCEL button.
- On the display, "CANCEL" and "- - - -" will blink for 5 seconds. During these 5 seconds while "CANCEL" and "- - - -" are blinking you can cancel preset stations.
2. Select a channel number by pressing the PRESET < or > button until you find the channel number of the station you want to cancel.
3. Press the CANCEL button and the station will be erased.

Scanning through Preset Stations

You can scan through your preset radio stations, stopping at any station you want to listen to.

1. Press the PRESET SCAN button.
   - ❑ The Unit scans your preset stations, starting with the frequency being received, and moving upward. Each preset station is received for a few seconds with the channel number linking.
2. If you want to listen to one of the preset stations, press the PRESET SCAN button again while the channel number is blinking.

If you do not stop at any station, the Unit will scan through the preset stations once, then return to the station tuned before scanning started.

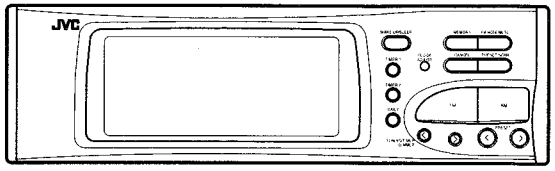
Receiving in Stereo or Mono

The CA-C55BK can receive broadcasts in either stereo or mono. When "AUTO" lights up on the CD/tuner display, the Unit automatically receives broadcasts in the mode they are transmitted. (When a stereo broadcast is received, "STEREO" lights up on the display.) Usually, leaving the Unit in Auto Mode, with "AUTO" lit, gives you the best reception.

To improve reception in cases like this, press the FM MODE/ MUTE button on the Tuner so that "MONO" on the CD/ tuner display lights up. Although you loose the stereo effect, reception may improve.

To restore automatic stereo detection, press the FM MODE/MUTE button so that "AUTO" lights up.

Using the Timers



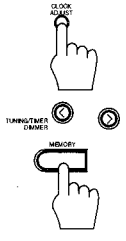
Four Timers:
- **TIMER 1, TIMER 2**
- **DAILY TIMER**
- **WAKE UP TIMER**
- **SLEEP TIMER**

The timers let you control recording and playing functions automatically.
Four types of timers are available:

- ❑ **Timer 1, Timer 2** — unattended recording of radio.
- ❑ **Daily** — recording of a radio that occurs at the same time every day.
- ❑ **Wake up Timer** — Wake up to music from any source.
- ❑ **Sleep Timer** — Fall asleep and have your CA-C55BK turn off automatically after a certain length of time.

Clock Setting

INPORTANT!
Set your clock



The timers depend on the clock: If the clock is right, the timers will work like you expect, but if the time is incorrect on the clock then the timers will also be incorrect.
Special Notice: The clock must be set, or the timers cannot be set!

So, lets set the clock first.

1. Press the CLOCK ADJUST button.
2. Set the hour by pressing the TUNER/TIMER/DIMMER < or > button. Press the > button increase the hour, and pressing the < button decreases it.
3. Press the MEMORY button.
4. Set the minutes by pressing TUNER/TIMER/DIMMER < or > button. Press the > button increase the minute, and pressing the < button decreases it.
5. Press the MEMORY button again and the clock is set and starts from zero second.

Caution! If there is a power failure, the clock looses its setting, the display shows "AM 12:00", and it must be reset.

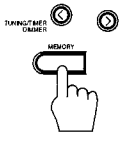
Setting Timer 1, Timer 2, and the Daily Timers

With these timers you can make a tape of a radio (or other sound sources) automatically whether or not you are there to start the CA-C55BK. You can also play the sound source at the specified time without recording them. For the timer to work correctly, you need to make sure of two things in addition to setting the time for the sound source and rape recorder to come on:

- ❑ The tape you want to record onto must be in deck B when you want to record.
- ❑ The radio station whose program you want to tape must be the last one played before timer comes.

Follow this procedure to set Timer 1, Timer 2, and the Daily timer:

1. Press the TIMER 1, TIMER 2, or DAILY button to tell the CA-C55BK which timer you are going to set. The corresponding indication (TIMER1, TIMER2, and DAILY) flashes in the CD/tuner display. As long as it is flashing, you can continue with the setting process. If you wait too long, and it stops before you are done, just press the button twice and start over.
2. Set the time you want the sound source to come on and the tape in deck B to start recording.
   - ❑ Use the TUNING/TIMER/DIMMER < or > button just like setting the clock.
3. Set the time you want the sound source to shut off and the tape in deck B to stop recording.
   - ❑ Use the TUNING/TIMER/DIMMER < or > button just like setting the clock.
4. Select the sound source with the TUNING/TIMER/DIMMER < or > button and press the MEMORY button to store it.
   - ❑ Each time you press the TUNING/TIMER/DIMMER < or > button, the unit gives you one of the following settings:



Display	What it means
SOURCE - - - - - - - - - -	Plays from whichever source was used just before turning off the CA-C55BK.
SOURCE TUNER	Plays an FM or AM broadcast
TIMER REC SOURCE TUNER	Records an FM or AM broadcast
SOURCE - - - - CD	Plays a CD
SOURCE TAPE	Plays tape
TIMER REC SOURCE - - - - - - - - - -	Records from whichever source was used just before turning off the CA-C55BK.

   - ❑ When you select CD as the source, you can designate the first track to play from the first 20 tracks on the disc in PLUS 1 tray (or the first disc in magazine, if no disc is loaded on the PLUS 1 tray) by pressing the PRESET < or > button.

5. Set the volume level with the TUNER/TIMER/DIMMER < or > button and press the MEMORY button to store it.
   - ❑ Each time you press the TUNER/TIMER/DIMMER < or > button, the unit gives you one of the following settings:

Display	What it means
VOL - - -	Volume set to level used before shut the power off
VOL - - 0	Volume off
VOL - - A	Volume barely on
VOL - - B	Volume at about a 1/4 turn of the volume control
VOL - - C	Volume at about a 3/8 turn of the volume control

These volume settings do not affect your recording because the recording level is automatically set by the Unit. So if you're not home at the designated time, be sure to set the volume level to minimum.

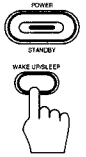
6. Press the TIMER1, TIMER 2, or DAILY button again, and the Unit will memorize the setting. Now the Unit is set to turn on and record the last station set when the Unit was last turned off.
   - ❑ Notice that the TIMER 1, TIMER 2, or DAILY indicator is lighted up on the display whenever the Timer is set.
7. To cancel the Timer settings, press the TIMER 1, TIMER 2, or DAILY button again; the corresponding indicator on the display goes off.

Note: If the volume control has already been turned half a turn or more when you set the volume level, you may not be able to set it to volume position 0, A, B, or C correctly.

Resetting the Timers
To reset a Timer, press the TIMER 1, TIMER 2, or DAILY button twice. Now the Timer is set again and will use the same start-time stop-time, source, and volume level as before.
To change your selection, press the CANCEL button and enter a new value.

It is very easy, and can be very disappointing, to forget to put in a tape, or to accidentally leave a tape in deck B you don't want recorded over. Although this happens to almost everyone sometimes, we hope it won't happen to you!

Wake up Timer



With this timer you can wake up to music from a CD, tape, or your favorite radio program.
1. Press the POWER button to shut the Unit off.
2. Press the WAKE UP/SLEEP button — The "WAKE UP" display will light up the CD/tuner display.
   - ❑ Each time you press the WAKE UP/SLEEP button the wake-up timer lapse changes in the following order:
     → 0:05 → 0:10 → 0:15 → 0:30 → 0:45 → 1:00 → 1:30 → 2:00 → 3:00 → (every hour) → 12:00 → Wake up timer off → (back to the beginning)
   - ❑ The "WAKE UP" indicator remains lit on the display to let you know that Wake Time is set.
4. To cancel the WAKE UP timer setting, press the POWER button to turn on the Unit.
   - ❑ If you select FM or AM (MW/LW) as the source, the last played station is the one which comes on at the Wake Up time set.
   - ❑ The volume when the timer turns on the source is the volume last set when the Unit was turned off. This can be quite a surprise first thing in the morning, so you might want to reset it before going to sleep.
   - ❑ If the CD is the source, it starts playing from the first track.

Sleep Timer

Use the sleep timer to turn the Unit off after a certain number of minutes when it is playing. Setting this timer, you can fall asleep to music and know your Unit will turn off by itself rather than play all night.
- ❑ You can only set the Sleep Timer when the Unit is on and a source is playing.
- ❑ To cancel the Sleep Timer , press the POWER button to turn off the Unit.

To set the Sleep Timer follow this procedure:
1. With the Unit on and a source playing, press the WAKE UP/SLEEP button. The "SLEEP" indicator on the display will start blinking.
2. Set the length of time you want the source to play before shutting off.
   - ❑ Each time you press the WAKE UP/SLEEP button while the "SLEEP" indicator is blinking, it changes the number of minutes shown on the display in this sequence:
     → 0:05 → 0:10 → 0:15 → 0:30 → 0:45 → 1:00 → 1:15 → 1:30 → 1:45 → 2:00 → Sleep timer off → (back to the beginning)
   - ❑ The actual time when the Unit will shut off shows in the right hand corner of the CD/tuner display where the clock time is usually displayed.

When the number of minutes you want shows on the display, just wait 5 seconds until the indicator stops blinking, but remains lighted.

The Unit is now set to turn off after the number of minutes you set.

Timer Priority
Since each timer can be set independently, you may have wondered what happens if the settings overlap. Here are the priorities for each timer.
- ❑ The Wake Up Timer has priority over Timer 1, Timer 2, or Daily timer. This means that if the start-time for one of the timers occurs before the wake-up time, the Unit will wait until the wake-up time to turn on.
- ❑ The Sleep Timer has priority over Timer 1, Timer 2, or Daily timer. This means that if the stop-time for one of the timers occurs before the sleep time, the Unit will wait until the sleep-time before turning itself off.

Checking the Remaining Time
After setting the Wake Up or Sleep Timer, you can check the time remaining until the Unit turns on (Wake Up Timer) or shuts off (Sleep Timer).
- ❑ Press the WAKE UP/SLEEP button shows you the remaining time on the CD/tuner display for 5 seconds. Then the display returns to the clock time display (Wake Up Timer) or the radio frequency display (Sleep Timer).

Adjusting the Brightness of the Display

In the stand-by mode, you can adjust the brightness of the clock display.
Press the TUNING/TIMER/DIMMER > button makes the display brighter.
Press the TUNING/TIMER/DIMMER < button makes the display dimmer.

Using the Remote Controller

How to Use the Remote Controller

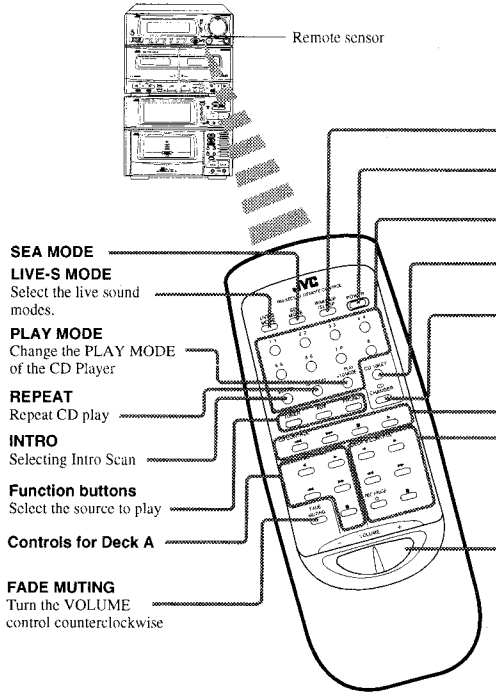
The Remote controller makes it easy to use many of the functions of the CA-C55BK from a distance of up to 23 feet away. You do need to point the remote sensor at the CA-C55BK front panel.

- ❑ Most of the buttons on the Remote controller do just what the ones on the CA-C55BK do.
- ❑ A few function are available only by using the Remote controller, and those are described below.

Using the Numeric Key Pad

The numeric key pad is used t specify a CD, a CD track or the number you have assigned to a preset radio station. To enter a number using the numeric key pad, follow these step:

- ❑ Before using the numeric key pad, check to see whether the numeric key pad is functioning to operate the CD player or tuner. This is depends on which button on the Remote controller you have pressed before using the numeric key pad. For example, if you press the TUNER before the numeric key pad, it can select a preset station. Pressing the CD CHANGER enable you to select a CD and also to operate the INTRO, REPEAR and PLAY MODE. If you press the CD 10KEY, it can select a CD track.
- ❑ For numbers between 1 and 10, just press the button with the number you want.
- ❑ For numbers from 11 to 20, first press the +10 key, then the one's digit of the number you want — to get 15, first press +10, then 5. For 20, press +10 and 10.
- ❑ For numbers from 21 to 30, press the +10 key twice; then press the one's digit — to get 25, press +10 +10 and 5. For 30, +10 +10 and 10.
- ❑ For number from 31 to 40, press the +10 key three times, then the one's digit of the number you want — to get 32, first press +10 +10 +10 and 2. For 40, press +10 +10 +10 and 10.

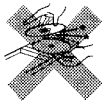


Care and Maintenance — General Notes

Compact Discs

Handle your compact discs, cassette tapes, and cassette deck carefully, and they will last a long time.

- Remove the CD from the case by holding it at the edges while pressing the center hole lightly.
- Do not touch the shiny surface of the CD, or bend the CD.



- Put the CD back in its case after use to prevent warping.
- Be careful not to scratch the surface of the CD when placing it back in the case.
- Avoid exposure to direct sunlight, temperature extremes, and moisture.

- A dirty CD may not play correctly. If a CD does become dirty, wipe it with a soft cloth in a straight line from center to edge.

CAUTION: Do not use any solvent (for example, conventional record cleaner, spray thinner, benzine, etc.) to clean a CD.

Moisture Condensation

Moisture may condense on the lens inside the Unit in the following cases:

- After starting the heating in the room.
- In a damp room.
- If the unit is brought directly from a cold to a warm place.

Should this occur, the Unit may malfunction. In this case, leave the unit turned on for a few hours until the moisture evaporates, unplug the AC power cord, and then plug it in again.

In general, you will have the best performance by keeping your tapes, CDs, and the mechanism clean.

- Store tapes and CDs in their cases, and keep them in cabinets or on shelves.
- Keep the cassette deck tape carriers and the CD tray closed when not in use.

Cassette Tapes

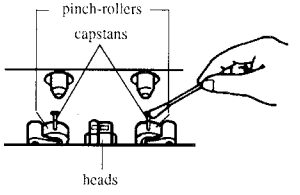
- If the tape is loose in its cassette, take up the slack by inserting a pencil in one of the reels and rotating.
- If the tape is loose, it may get stretched, cut, or caught in the cassette.

- Do not touch the tape surface.

- Do not store the tape:
  - In dusty places
  - In direct sunlight or heat
  - In moist areas
  - On a TV or speaker
  - Near a magnet

Cassette Deck

- If the heads, capstans, and pinch-rollers of the cassette deck become dirty, the following will occur:
  - Impaired sound quality
  - Discontinuous sound
  - Fading
  - Incomplete erasure
  - Difficulty recording
- Clean the heads, capstans, and pinch-rollers using a cotton swab moistened with alcohol.



- If the heads become magnetized, the Unit will produce noise or loose high frequencies.
- To demagnetize the heads, turn off the Unit, and use a head demagnetizer (available at electronics and record shops).

Troubleshooting

- If you are having a problem with your CA-C55BK, check this list for a possible solution before calling for service.
- If you cannot solve the problem from the hints given here, or the Unit has been physically damaged, call a qualified person, such as your dealer, for service.

Symptom	Possible Cause	ACTION
No sound is heard.	Connections are incorrect, or loose.	Check all connections and make corrections. (See pages 3 - 5.)
Impossible to record.	Cassette record protect tabs are removed.	Cover holes on back edge of cassette with tape.
Hard to listen to broadcasts because of noise.	The antenna is disconnected. The AM loop antenna is too close to the Unit. The FM wire antenna is not properly extended and positioned.	Re-connect the antenna securely. Change the position and direction of the AM loop antenna. Extend FM wire antenna to the best reception position.
The CD sound is discontinuous.	The CD is scratched or dirty.	Clean or replace the CD.
Unable to operate the Remote controller.	The path between the Remote controller and the sensor on the Unit is blocked. The batteries are discharged.	Remove the obstruction. Replace the batteries.
The CD tray cannot be operated.	The main AC power cord is not plugged in.	Plug in the AC power plug.
The CD does not play.	The CD is upside down.	Put the CD in with the label side up.
Operations are disabled.	The built in microprocessor may malfunction due to external electrical interference.	Unplug the Unit then plug it back in.
The cassette carrier cannot be opened.	The Unit was turned off because the timer was operated while the tape was running.	Turn on the Unit.

Specifications

Amplifier/Cassette Deck Section

Amplifier section

Output Power **30 watts per channel, min. RMS, both channels driven, into 8 ohms from 40 Hz to 20 kHz, with no more than 0.9% total harmonic distortion.**

Input Sensitivity/Impedance (1 kHz)

AUX/VIDEO	300 mV/47 kohms
PHONO	3 mV/47 kohms

Cassette Deck section

Frequency response

CrO_2:	30 - 16,000 Hz
Normal:	30 - 15,000 Hz
Wow and flutter	0.09% (WRMS)
Dimensions	245 x 183 x 340 mm (W/H/D) (9-11/16 x 7-1/4 x 13-7/16 inches)
Weight	5.6 kg (12.4 lbs)

CD Automatic Changer/Tuner

CD Automatic Changer section

CD capacity	7 discs
Dynamic Range	96 dB
Signal-to-Noise Ratio	102 dB
Wow and Flutter	Unmeasurable

Tuner section

FM Tuner

Tunig Range	87.5 - 108.0 MHz
Usable Sensitivity	0.95 µV/75 ohms (10.8 dBf)
Signal-to Noise Ratio (IHF-A weighted)	MONO 80 dB STEREO 73 dB

AM Tuner

Tuning Range	530 - 1,710 kHz
Dimensions	245 x 183 x 339 mm (W/H/D) (9-11/16 x 7-1/4 x 13-3/8 inches)
Weight	4.2 kg (9.3 lbs)

Power Specifications

Power Requirements	AC 120 V ∿, 60 Hz
Power Consumption	105 watts

Design and specifications subject to change without notice.